

### **REMARKS/ARGUMENTS**

In response to the Examiner's requirement for restriction, Applicants elect, with traverse, the subject matter of Group I (claims 1-17) for prosecution in this application. The Examiner is requested to reconsider the requirement for restriction for the reasons that follow.

In paragraph 3 of the Office Action, the Examiner states that unity of invention exists when there is a "technical relationship among the claimed inventions involving one or more special technical features". Respectfully, all of Groups I-III do indeed incorporate a "special technical feature" in the sense that the term is defined in the second sentence of paragraph 3 of the Office Action.

In broad outline, the present invention relates to lipid vesicle particles that have the following features:

- (a) they are targeted to a cell type of interest (e.g., by virtue of antibody/antigen binding – see claims 2 and 3);
- (b) they incorporate a cytolytic peptide that modulates the permeability of the particles in response to a predetermined metabolic signal from the targeted cell (when encountered by the particle); and
- (c) they incorporate a species that is "activated" on the modulation of permeability.

Thus the particles are targeted to a cell that provides a predetermined signal, examples of which are described in the final paragraph on page 2 of the specification. In

response to the metabolic signal, the cytolytic peptide modulates the permeability of the particles (see the description beginning in the third paragraph on page 5 through to the bottom of page 6). In response to this modulation of permeability, the species incorporated in the particle is activated. For examples of what is meant by "activated", attention is directed, for example, to the third complete paragraph on page 4 of the specification and also claims 10-12 and 29-31, as well as claim 38 in which the "species" is a therapeutic agent.

Lipid vesicle particles as defined above are believed to be novel and non-obvious and are the subject matter of claims 23 to 41 (i.e., the Examiner's Group III invention).

The particles have various uses. Thus, in accordance with the subject matter of claims 1 to 17 (i.e., the Examiner's Group I) the particles can be used for detecting a cell type of interest present or potentially present in a sample. If the cell type of interest is present, then the species is activated (by the mechanism described more fully above) by monitoring either directly or indirectly for the activated form of the species it is possible to determine whether or not the cell type of interest is present in the sample. For an example of such a technique, attention is directed to Section 1.4 on page 35 of the present specification.

A further possibility is to use the particles for modulating the activity of a cell type of interest. This is covered by claims 18 to 22 (i.e., the Examiner's Group II). In this case, the species that is activated on modulation of the vesicle is one that has an effect on

the cells. This method may be used, for example, for the treatment of pathogenic cells from a water source (see claims 20-22).

It will be appreciated from the above comments that the "special technical feature" that unifies the three Groups is the lipid vesicle particle that it

- (i) is targeted to a cell type of interest,
- (ii) incorporates a cytolytic peptide effecting modulation of permeability in response to a predetermined metabolic signal from the targeted cell, and
- (iii) incorporates a species that is activated on such modulation of permeability.

In view of the foregoing, the Examiner's analysis of the three Groups in paragraph 3 of the Office Action is not well founded. Reconsideration of the requirement for restriction and consideration of all of claims 1-41 in this application is requested.

An early and favorable Action on the merits is awaited.

Respectfully submitted,

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